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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/682,107	07/20/2001	Jefferson M. Kommers	VIGN1270	5626

25094 7590 09/01/2004

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EXAMINER

AL HASHEMI, SANA A

ART UNIT	PAPER NUMBER
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2171

DATE MAILED: 09/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/682,107

Applicant(s)

KOMMERS ET AL.

Examiner

Sana Al-Hashemi

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 June 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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DETAILED ACTION

Claim Status: 1 –26 are rejected.

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 4/2/2003 has been entered.

Applicant's arguments filed 6/18/2004 have been fully considered but they are not persuasive.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-24 rejected under 35 U.S.C. 103(a) as being unpatentable over Caid et al. (US Patent No. 5,619,709) in view of Light (US Patent No. 5,774,888).

1. Regarding Claims 1, 7, 13, and 19, Caid discloses a method of searching for a plurality of information objects comprising:

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Receiving a first query, (see Fig. 2A, column 6, lines 38-45, Caid);

Automatically expanding a scope of a search from the first query to a second query based on a hierarchy of keywords associated with the plurality information objects (see column 15, lines 42-50, Caid);

searching the database using the second query (see column 5, lines 26-36, Caid);

finding a first identifier for a first: information object that corresponds to the second query, wherein the first information object is part of the plurality of information objects (see column 5, lines 37-48, Caid);

Caid does not disclose the terminology “expanding a scope of a search from the first query to a second query”. However, Light discloses automatically expanding the scope of search (see column 4, lines 60-63, Light). It would have been obvious to the ordinary skilled artisan at the time of the invention to add/modify the Caid system by expanding the scope of search with the motivation of providing users with more options and higher number of responses which increases the possibility of receiving all the results needed.

2. Regarding Claims 2, and 14, the combination of Caid and Light discloses a method wherein:

the database comprises a plurality of information objects including the first information object and a plurality of keywords and the hierarchy of keyword, wherein the plurality of keywords include a first keyword and a second keyword (see column 5, lines 55-58, Caid);

each information object within the plurality of information objects has at least one related keyword from the plurality of keywords (see column 5, lines 37-48, Caid);

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the hierarchy defines a relationship among the keywords lying at a different levels within the hierarchy (see Fig. 14, Caid;

the first query comprises the first keyword but not the second keyword (see Fig. 14, Caid; and

the second keyword query comprises the first and second keyword (see column 5, lines 59-62, Caid).

3. Regarding Claims 3, and 15, the combination of Caid and Light discloses a method further comprising:

automatically determining a first association score between the first keyword and the second keyword based at least in part upon their positions within the hierarchy (see column 13, lines 1-8, Caid).

4. Regarding Claims 4, and 16, the combination of Caid and Light discloses a method further comprising automatically determining a second association score between the first keyword and the third keyword based upon their positions within the hierarchy, wherein expanding the first query is performed such that the second query does not include the third keyword (see Fig. 4, Caid).

5. Regarding Claims 5, and 17, the combination of Caid and Light discloses a method further comprising filtering at least some of the information objects within the plurality of information objects to meet a defined criterion (see column 13, lines 40-46, Caid).

6. Regarding Claims 6, 18, 25, and 26, the combination of Caid and Light discloses a method further comprising:

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determining an association score between each keyword within the first query and each keyword within the second query based at least in part upon their positions within the hierarchy; and

calculating a first relevance score for the first information object, wherein (see column 11, lines 20-25, Caid)

at least one first relevancy rating is obtained for the first information object (see column 11, lines 11-15, Caid);

the first relevance score includes a first sum divided by a number of keywords within the second query (see column 11, lines 11-15, Caid);

the first sum includes a first summation of first products (see column 11, lines 16-20, Caid);

and for each keyword within the second query, its first product includes a corresponding first association score and a corresponding first relevance rating (see column 4, lines 40-45, Caid).

7. Regarding Claims 8, and 20, the combination of Caid and Light discloses a method further comprising:

searching a database using the second query, wherein an information object is associated with the second keyword but is not associated with the first keyword (see column 6, lines 27-30, Caid);

and sending a second signal that includes an object identifier for the information object (see column 6, lines 30-37, Caid)..

8. Regarding Claims 9, 11, and 23, the combination of Caid and Light discloses a method wherein:

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the first keyword, the second keyword, and a third keyword are represented by a first node, a second node, and a third node, respectively, within the keyword hierarchy (see Fig. 14, Caid);

the method further comprises determining a first association score between the first node and the second node and a second association score between the first node and the third node, wherein the first and second association scores indicate that the first node is more closely associated with the second node than the third node (see column 13, lines 1-8, Caid);

and expanding is performed such that the second query does not include the third keyword (see column 6, lines 40-46, Caid).

9. Regarding Claim 10, the combination of Caid and Light discloses a method automatically determining an association score between the first keyword and the second keyword based at least in part upon their positions within the keyword hierarchy, wherein one keyword lies at a parent node and another keyword lies at a child node within the keyword hierarchy (see column 13, lines 1-8, Caid).

10. Regarding Claim 11, Caid discloses a method wherein the association score is a function of a distance between connected nodes within the keyword hierarchy, wherein one keyword lies at a parent node and another keyword lies at a child node within the keyword hierarchy (see Fig. 14, Caid).

11. Regarding Claims 12, and 24, Caid discloses a method wherein automatically determining the association score includes determining a first common ancestor wherein one keyword lies at a parent node and another keyword lies at a child node within the keyword hierarchy (see column 9, lines 55-59, Caid).

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12. Regarding Claim 21, the combination of Caid and Light disclose a data processing system readable medium wherein:

the first keyword, the second keyword, and a third keyword are represented by a first node, a second node, and a third node, respectively, within the keyword hierarchy (see Fig. 2A, Caid);

the method further comprises determining a first association score between the first node and the second node and a second association score between the first node and the third node (see Fig. 2B, Caid);

wherein the first and second association scores indicate that the first node is more closely associated with the second node than the third node (see Fig. 2C, Caid); and

expanding is performed such that the second query does not include the third keyword (see Fig. 2F, Caid).

13. Regarding Claim 22, the combination of Caid and Light discloses a data processing system readable medium the method further comprises automatically determining an association score between the first keyword and the second keyword based at least in part upon their positions within the hierarchy, wherein one keyword lies at a parent node and another keyword lies at a child node within the keyword hierarchy (see column 13, lines 1-8, Caid).

Response to Amendment

Applicant argues that Caid in view of Light fails to disclose “expanding a scope of search from a first query to a second query.”


Examiner disagrees. The combination of Caid in view of Light teaches the step of expanding scope of search from the first query to a second query, Referring to Fig. 2 A-F, Caid discloses the step of selecting a keyword from the list of hierarchy of keywords and Caid at column 15, lines 42-50, does expand the search within the requested terms by searching the “sub-icons” which provides more information to the user related to the searched term as disclosed in column 15, lines 42-49, Caid. Caid does not teach the terminology “expanding a scope of a search from the first query to a second query.” However, Light discloses automatically expanding the scope of search (see column 4, lines 60-63, Light). The combination clearly teaches the method of employing additional steps to expand the scope of terms by adding synonymous terms as taught by Light. On the other hand,

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Points of Contact

Any inquiry concerning this communication or earlier communications from the examiner should be directed to: Sana Al-Hashemi whose telephone number is (703) 305-4881. The examiner can normally be reached on Monday - Friday from 8:00 AM to 4:30 PM.. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet Metjahic, can be reached on (703) 308-1436. Any response to this office action should be mailed to: The Commissioner of Patents and Trademarks, Washington, D.C. 20231. Or telefax at phone number (703) 872-9306. For formal or draft communications, please label "PROPOSED" or "DRAFT". Hand-delivered response should be brought to Crystal Park II, 2121 Crystal Drive, 6th Floor Receptionist, Arlington, Virginia. 22202.

Sana Al-Hashemi
Patent Examiner
Technology Center 2100
August 23, 2004


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